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Universidad Politécnica de Madrid

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TRABAJO FIN DE GRADO

OPEN SOURCE WEBSITE

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MADRID, JUNIO DE 2014

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1. RESUMEN

La idea de este proyecto es acercar la imagen de Libertad de Información y su conocida variante Open Source, donde cubriremos en detalle la multitud de puntos que abarca. Está dirigida a todos los usuarios que quieran conocer de primera mano cómo se inició la idea de Libertad Tecnológica hasta sus aplicaciones. No solo para aquellos que quieran emplearla, sino también para aquellos que la ya la usan y necesitan recursos para nuevas ideas. De esta forma, nos acercaremos también a la idea de libertad que en la tecnología está actualmente en debate. El contenido se estructura siguiendo las siguientes ramas:

- Historia, desde sus orígenes hasta el presente.
- Economía, ventajas y desventajas de esta libertad.
- Problemas legales en distintos niveles
- Noticias y actualizaciones de aplicaciones.
- Sociedad, entorno a la aceptación y rechazo por los usuarios, además de su influencia en la ética, educación e innovación.
- Aplicaciones, donde se incluirán la mayoría de las aplicaciones más conocidas en cada una de las ramas de Open Source.

ABSTRACT

The topic finally chosen in the list of Professional Skills and Issues has been the Freedom of Information and its best known variant Open Source. We will try to cover in detail most of the points that includes history, economics, law, society and the various applications in which it have influenced.

It allows all the public to see first-hand the term of Open Source, from its beginnings to applications. Not just for those who want to use it, but for those who already use it and want to find sources and new ideas. It will also get a step closer to the idea of Freedom of Information as currently being debated. The main branches are going to address:

- History, from its origins to the present.
- Economic, advantages and disadvantages of being free.
- Laws, problems in different continents at the legal level.
- News, latest in its various applications
- Society, acceptance or rejection by the people, addition to the factors that influence as ethics, education, and arts innovation.
- Applications, where most try to include most current applications of each of the variants.

2. SCOPE

The main idea is to adapt the content of the course taken in class, *Professional Skills and Issues*, and its relation to the book “*Professional Issues in Information Technology, Frank Bott*”. This course aims to cover current topics in both the legal, social and professional development of the devices. In this way, we could include as one of the objectives of the web, some current issues in information technologies, as a blog.

The classification of all the information that is obtained from both classes like the book will have to adapt to a structure to keep the user, and incentivize him to keep learning and finding out new knowledge. Because not only influenced by Information Technologies in the development of this practice, we can also guide a little more thematic to a social, legal, and ethical environment. The audience that would go run this website would be targeted to those who want to expand their knowledge and improve their communication skills. In addition, it would include updated topics; even discussion could be made on the same frame, resulting in a space of expression and open dialogue.

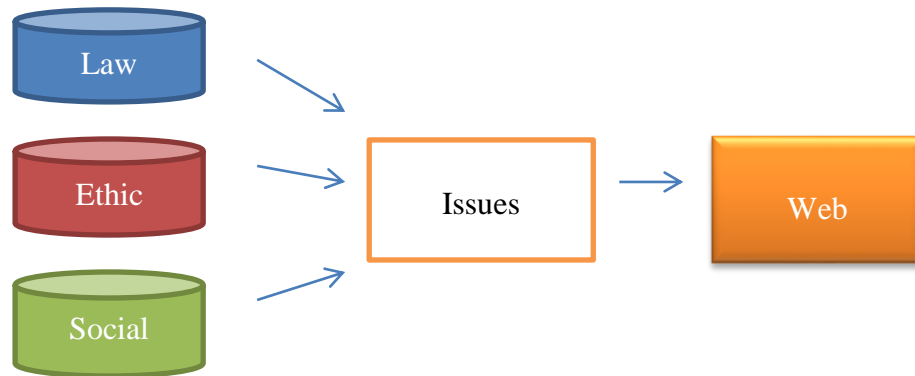
2.1 ISSUES

The field of study is closer to the user, different ways of expression. Also he update on issues of scope of technologies, which can contribute his knowledge, as well as see the opinions of other professionals on the subject. It tries to expose clear information, and concise, so that the reader can answer questions about:

- Legal issues
- Security
- Intellectual property rights
- Data protection
- Freedom of information
- Internet problems
- Misuse of Internet

Therefore, the audience it addresses the web is anyone interested in wanting to open their borders to new ideas, improve their knowledge on legal issues, and delve into the current problems in Information Technologies. This audience does not have to be professional in the field, only people become interested in a subject that involves them every day, which implies their security and rights on the network.

Since the field of technology is vast, also will be designed to incorporate new perspectives and ideas, new spaces tailored to each of the ideas, different backgrounds to identify the subject matter of the discussion.



The material available is the book: Bott, Frank. Professional Issues in Information Technology. Swindon: British Computer Society, 2005.

It also will include, as a video tutorial on how you can customize the frame discussion. Also we will have the book quoted text, and references. The user may include new photos as discussion, videos, or update his text.

3. WEB DEVELOPMENT

3.1 NAVIGATION

As shown in the sitemap, the main page will contain the various branches into which we can divide the idea of Open Source. You will have a first panel will start with limited content and ability to continue reading on the corresponding page. This content is divided into the categories panel by giving access to the various branches of the website. Each frame in its class will have a different image showing an approximation of the content. In the lower section, we have a summary of each of the points that comprise, in addition to direct access to them. In this way, we capture the user's attention to the topic that interests you know. In turn, it will show a shortcut to the various video tutorials to have a first approach to the product and its values.

3.2 TESTING

In the first cycle of testing, it will create a scenario drawn handmade where you can interact with the various elements. It will be scoring each of the problems and actions to be implemented, as well as user feedback. The observation method will we use about 5 users that define the quality and depth of the systems and the requirements you must complete.

3.3 PAGE MOCK-UP

The choice of blue, as well as being in keeping with the logo of Open Source in green, conveys a sense of security, confidence and seriousness, the same values that pursue the Freedom of Information.

The picture varies around the various topics. The first upper frame will contain another internal frame showing the first sentences of the content. This subframe will be semi-transparent and greyish tone, on the image of the topic.

In the same main page, with dark blue background like the body, is placed each letter subtopics in white and bold with an icon next to indicate an idea of what it contains. Under each title, a summary will also in white letters, concatenated with each of the topics. In this way, you will have an idea of what you can find and where to go.

In case the result from the first interface somewhat ambiguous, will contain a right, under the top panel, a list of video tutorials, including the explanation of the content. This framework will have a clear greyish background colour.

In the following pages, it will show a vertical side panel on the left to access the main page and each of the subtopics. This framework will be dark green to highlight on dark blue background, so it is faster to find at first.

3.4 DESIGN

This project is primarily aimed at all those who want to find out how the Open Source world works and how it is influencing this new idea in our culture. At the beginning, the original idea was to discuss Freedom of information, and what greater example of freedom than talking about this new idea emerged in the last decades. Above all, this website is not designed for technical professionals in computing, but for the general public, so that they can get access from their own computers and with a simple click, get the summary and necessary information to understand the new concept that Open Source is. The information collected is classified into five main categories: **History, Society, Economy, Applications and Networks.**

The design and mainframe of these pages are divided into 3 parts.

The *header* consists of the logo image on the left, and 4 buttons for direct access to the functionality that the user would like to have available at a glance. Near the logo in the lower position, we have placed a word to serve as a feedback. This way, the user will know what that page is for, and if a subsection, it is also signalled by its parent page with a feedback title. This contains information to help integrate the user with the web page, and when the cursor is placed on panel title, a balloon tip appears with the interactive mode of the page and a tip. In this way, the user can know this page before going into action.

At the bottom panel, in the section on the left, we place the *menu* with all its navigable web pages. This menu is displayed and opened on the vertical axis, so it does not overlap the hotspot of the content. Also in this section, it also includes a button "Home" in case the user does not notice that the logo can also return to the main page.

In the section of the *content*, you will find different ways to interact with information:

1. Click on an image to rotate.
2. Position the cursor over an image to display text.
3. Position the cursor over an image and title to display hidden text.
4. Slide images with different text content.
5. Scroll on information content and images.
6. Position the cursor over the contact form to fill a simulated form.

Thus, the user should only be worried about what he wants to see, plus choosing from the categories on the application's page.

Each of the forms of interaction is in keeping with the information displayed to the user. Therefore, in the case of our **History page**, the evolution of content is displayed according to the user by choosing different images, thus motivating the desire to continue along the chain of images. In **Society**, we have various subcategories of structured content grouped in bubbles, so the user does not need to read all the texts, only those of interest for him.

Economics is a subject often treated delicately, and not all users see it the same way, so we present a series of slide pictures with text summarizing the main ideas of the economic maintenance of Open Source. The **Application** design is structured by categories that can be grouped into the main branches of Open Source.

Thus, each category will be contained in various paragraphs, and its main ideas, and external links to reference to the original text of the main website.

As the last category of our content, **Networks**, being the cornerstone of communications between users, so we have made a selection of the main streams that may be of interest for the user. Thus, placing the cursor over the image will show a little description of the external website, and clicking on it, will lead us to the official site.

There are also three other categories outside of the Open Source content.

- The first, *Downloads*, shows a list of the best selections of open source software for the user, with a small description and redirection to the website for downloading.
- The next category contains a *video tutorial* and *related videos* on OS. A video tutorial created in mp4 format, which contains a summary of each of the pages visualization and interaction. For related videos, one of the best and most current sources is TED talks. We present a playlist of TED talks for users interested in these lectures, whether Ecology, Economics or OS in general.
- And in the last category, we have 4 pages: Feedback form to contact the developer, the source code, references and navigation map. As shown in this last, the development of navigability has turned towards a hierarchical model, with some central sections, such as applications.

Finally, with regard to design, I started to work on Chrome development tool, which led me to disrupt and deconstruct the code, design and usability, so I used an external tool Tabifier¹ to organize it better, and to leave the code handy.

4. ANALYSIS AND SOLUTIONS

Early in the development of the project, with the design finally built, I found different irreversible failures with css, so I decided to start working on version control Dropbox, roasted as well as creating my own versions in different subfolders. Thus, in total the project finished with 17 subversions in my folder project and about 300 automatically stored in Dropbox.

Another problem was to work on Dreamweaver and creating tables. I have used free resources and external open sources to build this website that could not always operate or fit within a table. Halfway through the project, I did a clean up on the tables in each of the pages, replacing them with DIV tags and classes, which provided me more freedom to work on the development tool of Chrome. Also, another of my purposes was to include external sources, but adapting them to my design, which took me more time than expected in the performance of their css and JavaScript.

I also have to mention that if I had adopted the idea of the DIV tag from the beginning, it would have been easier, but I wanted to try working with a page using tables as my first time.

Also, as I was styling the tag and its attributes were growing, I started to export these classes accessible and structured them in a single file `style_final.css` where possible.

¹ Tabifier, <http://tools.arantius.com/tabifier>

I used JavaScript code, besides for some interactions with images, also for:

- To display a more gentle on the load of each page transition,
- And to give a rebound effect to the title feedback page, using a constant function of condition odd or even.

And with the use of JavaScript, also appeared the problem of slowdown in loading pages. The only solution I found, in addition to export it to an external file, was placing calls to JS at the end of `<body>`, so that it could load all the items and finally execute the functions.

4.1 ALTERNATIVES

As I mentioned above, I would have liked to start with a design on the DIVs tag to work more freely between relative and absolute positions. Moreover, I would have liked the product design for multiple platforms and resolutions, i.e., working on measures in% and not in px. Thus, if we had 1024x768 screen, one could see the same thing in one of 1366x768, finally opting for the latter resolution, being this the most currently common. In an even larger project, it could be designed for mobile platforms, but in this case, the content and functionality in CSS would be irrelevant and less accessible to not work with cursors.

Actually, I would not do many more different changes, because every project has to evolve, but in another cycle of development, along with the evolution of Open Source. The planning of the project was estimated to complete the development and begin testing in early March, but the adaptation of external sources and some design flaws, eventually slowing evolution.

4.2 MULTIMEDIA

In a straightforward manner, media environments influence the user's desire of wanting to get into contact with the contents. At the beginning, in the phase of research, I had about 12 pages of information content to show, but I was a lot of information to show and this was not my goal. So, through the web pages, the user comes into direct contact with what he really wants, clear information.

With interactive elements, the users are part of the page, and not just a mere reader, but they can get involved and choose for themselves what they want and know how.

4.3 STRENGTHS AND WEAKNESSES

One of the attributes and strengths that most represents this website is its interactivity, but which can also become its weakness. By far, the audience that is addressed in this case are not only professional technicians, who had been associated with this new idea, but it is open, as its name suggests, for everyone.

It also includes colours associated with relaxation, nature and freedom, feelings that allow the user to feel not in a page with high technical content, but in a more colloquial way. And like any source Open Source, it will always be open to change and adaptations, while the users give the ideas they want to share.

The general idea is that this website will be strengthened in the elements that will come more to the general public, even to be a teaching tool in the classroom. In my case, the passion for the web environment has provided me with managing the various sources I found, plus a smooth development. Although There is not currently much information about the new idea Open Source, it will gradually start to emerge new groups or communities that will help to develop it.

Moreover, my enthusiasm to create an environment for the average user, more interactivity, has consumed much of the development of the practice, including decreasing the quality of the content instead of presentation. I must emphasize that in this part, although Wikipedia is not a product of verifiable content, is where I based the website content, referencing it at all times, and comparing it with official pages, OpenSource.com and OpenSource.org. Thus, in some specific fields and especially terminology of certain fields, I had to reference content from lack of knowledge on the subject.

5. CONCLUSION

A very interesting project that has tested my limits of design and increased my expectations in web development environments. I had enough desire to work in a quality project to demonstrate how far the imagination and creativity can influence the interaction with the user, and this work has allowed me to learn, refine and define my way to work, and to establish a design prior on which to base the whole structure.

I think this project reflects my overcoming as a student, since each new bug that came, it was replicated in all files, which made complicated the workflow, and having to go back to see where to fix it.

6. REFERENCES AND SOURCES

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